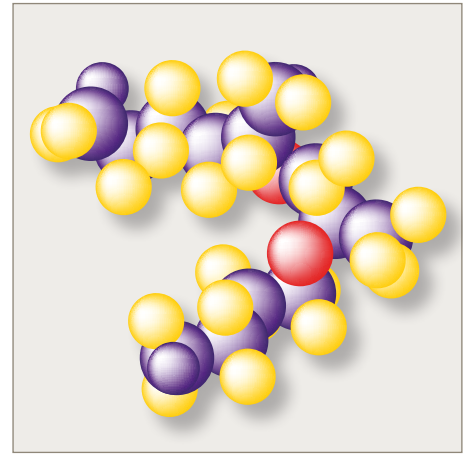
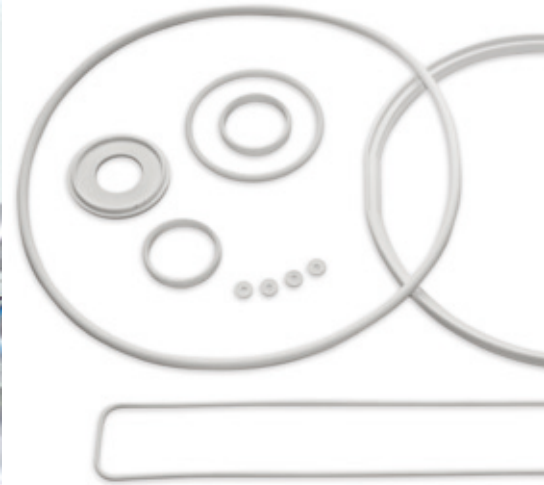


Parofluor® (FFKM) V8921-75

for process technology



The universally usable Parofluor® compound V8921-75 is recommended due to its clearly improved sealing force, enhanced chemical resistance and low contamination by extractions in pharmaceutical and sterile applications. It complements the Parofluor® family of high-performance perfluoroelastomers and is designed for use with challenging and oxidising media such as fluorine gas and concentrated nitric acid. Its outstanding mechanical properties and excellent permanent elasticity guarantee long service life in operating temperatures of up to 260 °C and thus significantly increase productivity.

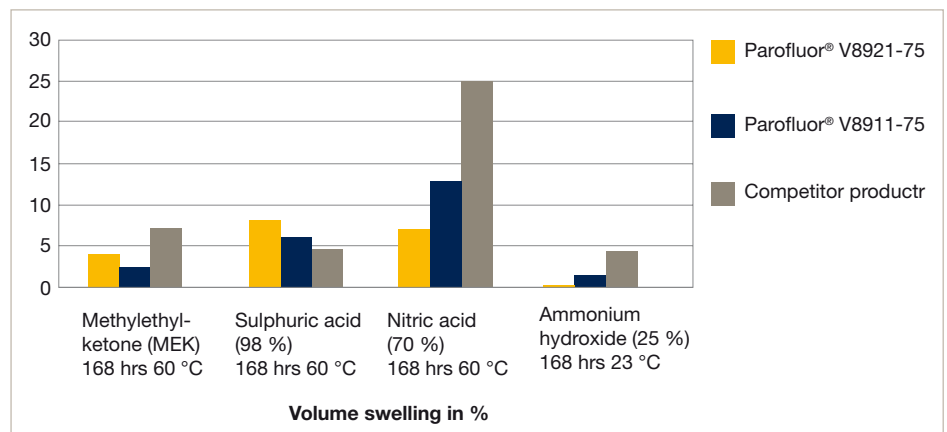


Properties

- Superior chemical resistance in aggressive, acidic and oxidising media, in aggressive plasmas and dry process gases
- Good resistance in hot water and steam
- Outstanding temperature resistance from -15 °C to 260 °C
- Excellent sealing function due to outstanding surface quality
- Also available as UHP (Ultra High Purity) version

Recommended applications

- Chemical and process technology, e.g. in mechanical seals, quick couplings, pumps and valves
- Pharmaceutical industry
- Surface, painting and printing technology
- Refineries
- Aerospace industry
- Semiconductor production (as UHP version)
- Energy exploration/extraction and production



Outstanding chemical resistance

Low volume swelling of the elastomer in the active media is an indicator, among other things, for flawless functionality in many applications and prevents destruction of the sealing element by extrusion or blocking. The stated test results were obtained in laboratory tests and confirm minimal volume swelling of the V8921-75 compound which thus qualifies as

the best material for aggressive process media. This makes Parofluor® V8921-75 featuring the latest polymer technology and outstanding chemical and thermal resistance the material of choice in aggressive, acidic and oxidising media.

Selection of the base elastomer

Media compatibility and temperature resistance are decisive characteristics for the

selection of the base rubber. Therefore, exact knowledge of the temperatures and media – including lubricants and cleaning agents – to which a sealing element is exposed in a concrete application is an indispensable prerequisite for selecting a suitable base elastomer.

Medium	Parofluor® V8921-75 (FFKM)	HiFluor® (FKM)	Fluoro-rubber (FKM)	Ethylene-propylene-rubber (EPDM)	Silicone (VMQ)	Hydrated NBR (HNBR)
Steam (<150 °C)	1	2	4	1	4	4
Steam (>150 °C)	1	1	4	1	3	4
Acetic acid, glacial acetic acid (concentrated)	1	2	4	2	4	4
Acetic acid, hot (high pressure)	1	1	4	1	1	3
Methylethylketone	1	1	4	3	3	4
Soda liquor, 25%	1	2	4	1	4	4
Peracetic acid	1	1	4	1	4	4
Nitric acid (concentrated)	1	1	1	4	4	4
Toluole	1	1	1	4	4	4
Hydrogen peroxide	1	1	1	4	4	3
Citric acid	1	1	1	1	1	3
Operating temperature in °C	1	1	1	1	1	1
Einsatztemperatur (°C)	260	250	200	150	200	150

1 minimal or no volume swelling, very good resistance
3 medium volume swelling, conditional resistance

2 low volume swelling, limited resistance
4 high volume swelling, no resistance

For further detailed resistance information, please see Parker media resistance list.

Physical data

Test	Dimension	Standard	Value
Material base	-	-	FFKM
Colour	-	-	white
Hardness on standard test specimen	Shore A	DIN 53 505	75 ^{+8/-5}
Hardness on O-ring (s > 1.78)	IRHD	DIN ISO 48	75 ^{+5/-8}
Modulus 100 %	[N/mm²]	DIN 53 504	7,4
Tensile strength	[N/mm²]	DIN 53 504	10,5
Ultimate elongation	[%]	-	149
Compression set 70 hrs. / 200 °C	[%]	DIN ISO 815	18
Operating temperature	°C	-	-15 / 260

The measured values of the typical properties stated above are average values that have been determined in tests under laboratory-like conditions. These values do not necessarily correlate with results determined on the finished part. Our information does not release the user from the obligation to perform suitability tests. Manufacturing processes and raw materials contained in the products are adjusted in line with technological progress and legal requirements.

Parker meets the requirements of the Radiation Protection Regulation of the Federal Republic of Germany.